

ABSTRACT

A servo writer that writes servo information onto a disk of a hard disk drive. The servo writer can write servo information onto a disk of a hard disk drive while the disk is within an inner chamber of a housing. The rotating disk creates a flow of fluid within the inner chamber. The disk is rotated during the servo writing process. The density of a fluid medium within the inner chamber is controlled by a medium control system so that the density of the medium is less than the density of air at one atmosphere. Lowering the density decreases the amplitude of vibrational forces created by the flow of fluid. Decreasing the amplitude reduces errors in the servo writing process. The density can be reduced by pulling a vacuum within the inner chamber. The density can also be reduced by filling the inner chamber with a gas such as helium that has a lower density than air.